EGI-InSPIRE

SETTING UP VOS IN EGI: AN INVENTORY OF BASIC AND GENERAL SERVICES REQUIRED

(TNA3.4)

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Abstract

The aim of this document is to provide a list of the basic services required for setting up a VO and the effort estimated for its management.

I. COPYRIGHT NOTICE

II. DELIVERY SLIP

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III. DOCUMENT LOG

Issue	Date	Comment	Author/Partner
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IV. APPLICATION AREA

This document is a public internal report of the EGI-InSPIRE project.

V. DOCUMENT AMENDMENT PROCEDURE

Amendments, comments and suggestions should be sent to the authors. The procedures documented in the EGI-InSPIRE "Document Management Procedure" will be followed: https://wiki.egi.eu/wiki/Procedures

VI. TERMINOLOGY

A complete project glossary is provided at the following page: http://www.egi.eu/about/glossary/.

1 BASIC AND GENERAL SERVICES REQUIRED.

After the approval of a new VO, there are several services that need to be provided for. Those services are general ones and could be hosted on resources shared by different VOs.

VOMS Service		
Hw Resources	Not defined but it is a lightweight software. The resource can be shared with other services and VOs.	
Issues	It is a critically service regarding availability, although it requires low bandwidth, disk and CPU consume. Replication is recommendable.	
Cost	***tasks***	***cost***
Infrastructure operation cost	Ensuring availability through automatic monitoring. It requires periodic (bi-yearly) update of VO certificates. Backups needed.	Low cost for setting up a new VO. Low operation costs but need for quick reaction (on duty operation).
VO operation cost	Remote (web) operation for creating and deleting users. Answer requests for information on users misusing resources. Monitoring for checking availability of the service.	Low operation cost on a daily basis.
NA3 cost	Interface for requesting new VOs for the VOMS server. Compilation of usage information and tests.	Low cost only at the setup

MyProxy Service		
Hw Resources	Not defined but it is a lightweight software. The resource can be shared with other services and VOs.	
Issues	It requires low bandwidth, disk and CPU consume. Replication is easy and can reduce effort on availability.	
Cost	***tasks***	***cost***
Infrastructure operation cost	Ensuring availability through automatic monitoring. No backup needed. Reconfiguration with the WMS supported is needed.	Low cost for setting up a new VO. Low operation costs
VO operation cost	Basic monitoring.	Very low operation cost.
NA3 cost	Compilation of usage information and tests.	Low cost only at the setup

LFC Service		
Hw Resources	A dual-core computer with 1-2 Gb RAM also hosting the database on the same or separate host is recommended. The resource can be shared with other services and VOs, depending on its capability.	
Issues	It is a critically service regarding availability and it requires high bandwidth, but average disk and CPU. Replication is only possible for read-only, so it becomes a bottleneck in many cases.	
Cost	***tasks***	***cost***
Infrastructure operation cost	Monitoring. Reports are often requested (e.g. when SEs listed are decommissed, users leave from a supported VO, xxx). Daily backups needed.	Medium cost for setting up a new VO. Medium operation costs and short reaction time (on duty operation).
VO operation cost	Monitoring for checking availability of the service. Interact with LFC manager when issues appear. Checking the availability of SEs through it.	Medium cost on daily operation, combined with the supervision of the storage infrastructure.
NA3 cost	Interface for requesting new VOs for the LFC server. Requesting storage space on the system. Compilation of usage information and tests. Periodic monitoring of the usage of the resources.	Medium cost on the set-up. Weekly operation to monitor the usage of resources.

WMS Service		
Hw Resources	A quad-core processor is recommended to better handle parallel matchmaking and all the different sub-services running on a WMS, with a minimum of 4 GB RAM memory and a minimum disk space that depends on the load and type of jobs submitted (Minimum 30-40 GB) The resource can be shared with other services and VOs, depending on its capability.	
Issues	It is a critically service regarding availability and it requires high bandwidth and CPU. Replication is simple and recommendable, since it stores only local information.	
Cost	***tasks***	***cost***
Infrastructure operation cost	Intensive monitoring. No need for backups.	Medium cost for setting up a new VO. Medium operation costs and short reaction time (on duty operation).
VO operation cost	Monitoring for checking availability of the service. Checking the availability of CEs through it.	Medium cost on daily operation, combined with the supervision of the computing infrastructure.
NA3 cost	Interface for requesting the support of new VOs for the WMS server. Requesting storage space on the system. Compilation of usage information and tests. Periodic monitoring of the usage of the resources.	Medium cost on the set-up. Weekly operation to monitor the usage of resources.